

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) Method for dynamic adaptation of the support of the body, ~~in particular the lateral support~~, of a person seated on a vehicle seat, the method comprising: in which

predicting and setting, by an adaptation system which is integrated in the vehicle seat, a measure of a current adaptation taking into account [[the]] current vehicle velocity ~~is predicted and is set by an adaptation system which is integrated in the vehicle seat, characterized in that the prediction is performed~~ from stored data over [[the]] current road course, onto which data [[the]] current vehicle data are ~~projected~~, projected; and in that

actuating the adaptation system ~~is actuated~~ taking into account the adaptation time inherent in the system, ~~in such a way that, whereby when the event an event~~ requiring the adaptation occurs, ~~preferably when a bend is traveled through~~, at least one adaptation presetting adapted thereto is achieved.

2. (currently amended) Method according to Claim 1, ~~characterized in that~~ wherein a correction of the adaptation presetting is carried out with currently measured vehicle data during the event requiring the adaptation.

3. (currently amended) Method according to Claim 1, ~~characterized in that~~ wherein the current road course is obtained from a digital road map which contains route data relating to a traffic network and attribute data assigned to the route data, in that data of seat adaptations which have been carried out is stored in an assignment to route data as adaptation attributes in the road map, and in that, when the route section is traveled along again, the adaptation system is actuated using the adaptation attributes.

4. (currently amended) Method according to Claim 3, ~~characterized in that~~ wherein a velocity-corrected adaptation measure is stored as adaptation attribute.

5. (currently amended) Method according to Claim 1, ~~characterized in that~~ wherein in order to determine the adaptation measure required when a bend is traveled through, the expected lateral acceleration which acts on the vehicle seat is predicted and the degree of lateral support is thus calculated.

6. (currently amended) Method according to Claim 2, ~~characterized in that~~ wherein when the bend is being traveled through the lateral acceleration which really occurs is measured and the degree of lateral support is thus corrected.

7. (currently amended) Method according to Claim 3, ~~characterized in that~~ wherein the predicted and/or measured lateral acceleration is stored as adaptation attribute.

8. (currently amended) Method according to Claim 5, ~~characterized in that~~ wherein when the maximum value of the lateral acceleration which is derived from a

predicted limiting velocity for travelling through a bend is exceeded by the predicted lateral acceleration a warning signal for the driver is issued.

9. (currently amended) Method according to Claim 8, ~~characterized in that~~ wherein the warning signal is fed to the driver in a haptic way by suddenly increasing the lateral support on the side of the seat which is on the outside in the direction of curvature of the bend.

10. (currently amended) Vehicle seat ~~having~~ comprising:

a seat part, [[and]]

a backrest, ~~having~~

an adaptation system for adapting [[the]] body support, ~~in particular the lateral support~~, of a person seated on the vehicle seat, ~~which have~~ the adaptation system including air cushions which are integrated at least in side bulges of the seat part and/or backrest, and a compressed air regulating device for adjusting the air pressure in the air cushions, [[with]]

a control unit which has a control computer and is connected to the compressed air regulating device and generates, from a lateral acceleration value fed to [[it]] the control unit, a control signal for setting a filling pressure by the pressure regulating device, ~~and to~~

a sensor connected to the control unit for measuring the vehicle velocity, ~~characterized by~~

a prediction device for predicting the lateral acceleration expected in a current curve, and

a prediction filter which applies the predicted lateral acceleration to the control unit taking into account the filling pressure-dependent filling times of the adaptation system.

11. (currently amended) Vehicle seat according to Claim 10, ~~characterized in that~~ wherein the prediction device has a digital road map which contains route data relating to a traffic network and attribute data assigned to the route data, in that time points of a change in filling pressure by the compressed air regulating device can be stored in a relationship with the vehicle velocity and the route data as adaptation attributes in the road map, and in that, when the route section is traveled along again, the prediction filter adapts the adaptation attributes to the current driving velocity and uses it to specify the time when the predicted lateral acceleration is applied to the control unit.

12. (currently amended) Vehicle seat according to Claim 10, ~~characterized in that~~ wherein the prediction device has a digital road map which contains route data relating to a traffic network and attribute data assigned to the route data, in that filling pressures which are implemented by the compressed air regulating device can be stored, in a velocity-corrected fashion, in a relationship with the route data as adaptation attributes in the road map, and in that, when the route section is traveled along again, the prediction filter directly applies the adaptation attributes to the control computer as set point pressure values.

13. (currently amended) Vehicle seat according to Claim 10, ~~characterized in that~~ wherein the prediction device predicts a maximum value of the lateral acceleration from a predicted limiting velocity with which a current bend can be traveled through, and in that when the maximum value is exceeded by the predicted lateral acceleration, said prediction device applies a maximum pressure value as a set point pressure value for setting the filling pressure in the filling cushions which are arranged on the side of the vehicle seat located on the outside in the direction of curvature of the bend.

14. (new) A method for dynamic adaptation of vehicle seat support, the method comprising:

predicting a desired seat support in a curved road section on the basis of vehicle velocity from stored road data for a road which the vehicle is traveling on, and

actuating an adaptation system to provide a seat support based on the predicted desired seat support when the vehicle arrives at the curved road section, taking into account delays in the adaptation system.

15. (new) The method according to Claim 14, wherein predicting a desired seat support includes:

predicting a lateral acceleration in the curved road section on the basis of vehicle velocity from the stored road data; and

predicting the desired seat support based on the predicted lateral acceleration.

16. (new) The method according to Claim 15, wherein when a maximum value of the lateral acceleration for the curved road section is exceeded by the predicted lateral acceleration a warning signal for the driver is issued.

17. (new) The method according to Claim 15 further comprising providing the seat support partially based on lateral acceleration measured when the vehicle is travelling in the curved road section.

18. (new) The method according to Claim 14 further comprising storing data with the predicted desired seat support as a function of vehicle velocity and road location along a road the vehicle is travelling on so that the stored data can be used in the future to predict desired seat support on the basis of vehicle speed and location on the road when the vehicle travels again on the same road.

19. (new) The method according to Claim 14 further comprising storing data with pressure, which is supplied to seat cushions to provide seat support, as a function of vehicle velocity and road location along a road the vehicle is travelling on so that the stored data can be used in the future to predict seat cushion pressure on the basis of vehicle speed and location on the road when the vehicle travels again on the same road.

20. (new) The method according to Claim 14 further comprising storing data with lateral acceleration as a function of vehicle velocity and road location along a road the vehicle is travelling on so that the stored data can be used in the future to predict lateral on the basis of vehicle speed and location on the road when the vehicle travels again on the same road.

21. (new) A vehicle seat system comprising:

a vehicle seat;

an adaptation system for adapting the vehicle seat for body support, the adaptation system including,

air cushions which are integrated in the vehicle seat, and

a compressed air regulating device for adjusting air pressure in the air cushions;

a control unit including a control computer, the control unit being connected to the compressed air regulating device for setting air cushion pressure;

a vehicle speed sensor, the vehicle speed sensor being connected to the control unit;

a prediction device that predicts lateral acceleration in a curved road section before the vehicle arrives at the curved road section; and

a prediction filter that sends the predicted lateral acceleration to the control unit to set air cushion pressure in accordance with a desired seat setting for the predicted lateral acceleration when the vehicle arrives at the curved road section, taking into account a delay of the adaptation system .

22. (new) The vehicle seat system according to Claim 21, wherein the prediction device is configured to store data with air cushion pressure as a function of vehicle velocity and road location along a road the vehicle is travelling on so that the stored data can be used in the future to predict cushion pressure on the basis of vehicle speed and location on the road when the vehicle travels again on the same road.

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23. (new) The vehicle seat system according to Claim 21, wherein the prediction device is configured to store data with lateral acceleration as a function of vehicle velocity and road location along a road the vehicle is travelling on so that the stored data can be used in the future to predict lateral acceleration on the basis of vehicle speed and location on the road when the vehicle travels again on the same road.